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2007
June 10, 2006

Mr. Timothy Fischer
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO) Groundwater Operable Unit
Monthly Report; May 1 - May 31, 2007 Reporting Period**

Dear Mr. Fischer:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period May 1 – May 31, 2007.

Sincerely,

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Linda Tape - Husch & Eppenberger
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: June 10, 2007
Period Covered: May 1 - May 31, 2007

Work Performed During the Reporting Period

Site Work

- No site work was scheduled during the reporting period.

Groundwater Treatment

- As agreed upon with EPA, the Groundwater Migration Control System (GMCS) continues to be operated to maintain the total pumping rate equal to the computed inflow rate, based on the average of the gradients measured in the two existing pairs of piezometers located immediately upgradient of the Site R landfill
- For the month of May, the system was operated in the above manner,. However, the river stage was high for the first three weeks of the month and the system remained off for this period. The control program started the pumps on May 22nd and pumping continued at low flow rates for the rest of the month. Because the flow rates were typically less than 50 gpm, extraction well EW-2 pumped by itself for the majority of the time. The other pumps, EW-1 and EW-3, only operated for a few days.
- On May 1st, the upgradient member of piezometer pair PZ-8 malfunctioned. Temporary repairs were made and the system was restored to normal operations on May 4th. On May 17th the transducer was shutdown and a corroded electronic modules was replaced. The system was returned to normal service that same day.
- On May 7th, construction of approved alterations to the pumping system began. These alterations consisted of the following:
 - ♦ Installation of a standpipe at the discharge end of the pipeline to ensure that the pipe flows full at all times, thus enabling the installation of a leak detection module in the control software.
 - ♦ Installation of gate valves in each of the well discharge lines. These valves will allow each well to be isolated for maintenance purposes.

- ♦ Replacement of the carbon steel plug valves (used for low flow control on each of the wells) with stainless steel valves to provide increased corrosion resistance and longer service life.

Construction of these alterations was completed on May 15th and the remote actuators were replaced and calibrated on May 17th.

- In addition to these alterations, routine maintenance on the wells was completed at the same time. These activities included servicing the air release valve at the high point of the discharge line and examination of the pitless adapters on each well. Instead of removing the pumps and pitless adapters, a down hole video camera was used to examine the adapters. No evidence of pitting or other damage was observed.
- On May 27th, fluctuations and instabilities in the pumping rates were observed and it was noted that extraction well EW-3 appeared to be malfunctioning. Testing confirmed that the well was not capable of pumping more than 30 gpm. A new pump and motor were installed on May 29th. However, the problem persisted and the manufacturer of the variable frequency drive and control system was contacted to schedule a service call. The earliest opportunity for such a call is June 7th. In the interim, the control algorithm has been rewritten to utilize wells EW-1 and EW-2 only.
- Validated analytical data from the fourth quarter 2006 groundwater samples obtained from the performance monitoring wells were submitted during the reporting period..
- First quarter 2007 groundwater samples from the performance monitoring wells, as well as the first 2007 semiannual sediment and surface water samples from the Mississippi River were being validated.
- Water level and pumping data for the reporting period are attached.

Schedule

The Agency is currently reviewing various submissions to determine if construction is complete.

Submittals During Reporting Period

There were no submittals during the reporting period.

Work Scheduled for Next Reporting Period

- Continue operating the extraction system to maintain the total pumping rate equal to the computed inflow rate

- Complete the validation of the first quarter 2007 groundwater samples from the performance monitoring wells, as well as the first 2007 semiannual sediment and surface water samples from the Mississippi River, and submit to the Agency.
- Collect second quarter 2007 groundwater samples from the performance monitoring wells and submit for analyses.
- Mow grass on site and inspect disposal site cover.

PUMPING DATA

GROUNDWATER MIGRATION CONTROL SYSTEM

MAY DAILY AVERAGE PUMPING RATES AND WATER LEVELS

		PUMPING RATE					
		Computed	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	
Date/Time		Q					
05/01/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	405.09
05/02/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	404.94
05/03/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	404.72
05/04/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	405.01
05/05/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	405.01
05/06/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	404.16
05/07/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	403.18
05/08/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	402.79
05/09/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	405.62
05/10/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	408.28
05/11/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	409.32
05/12/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	409.37
05/13/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	409.22
05/14/2007	Daily Average	0.00	5.36	1.65	3.71	0.00	408.95
05/15/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	408.70
05/16/2007	Daily Average	0.00	2.61	0.99	0.79	0.83	408.32
05/17/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	407.38
05/18/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	405.88
05/19/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	404.00
05/20/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	402.48
05/21/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	400.67
05/22/2007	Daily Average	2.04	6.77	0.00	6.77	0.00	398.94
05/23/2007	Daily Average	14.77	15.80	0.00	15.80	0.00	397.85
05/24/2007	Daily Average	19.89	22.33	0.00	22.33	0.00	396.96
05/25/2007	Daily Average	45.17	48.14	0.00	48.14	0.00	396.10
05/26/2007	Daily Average	37.63	44.28	5.38	33.36	5.53	395.91
05/27/2007	Daily Average	92.50	77.71	30.54	43.42	3.75	395.77
05/28/2007	Daily Average	62.70	51.92	18.24	33.68	0.00	396.91
05/29/2007	Daily Average	0.65	18.71	10.49	6.27	1.95	398.85
05/30/2007	Daily Average	0.00	0.28	0.27	0.00	0.02	399.39
05/31/2007	Daily Average	15.94	15.40	2.15	13.25	0.00	398.81

GROUNDWATER MIGRATION CONTROL SYSTEM

MAY DAILY AVERAGE PUMPING RATES AND WATER LEVELS

		GROUNDWATER LEVELS											
Date/Time		PZ-5U	PZ-5D	Delta	PZ-6U	PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U	PZ-8D	Delta
05/01/2007	Daily Average	396.08	396.77	0.69	395.26	395.45	0.19	395.41	395.27	-0.14	395.73	397.59	1.62
05/02/2007	Daily Average	396.27	396.98	0.70	395.46	395.84	0.38	395.59	395.45	-0.14	#DIV/0!	397.86	#DIV/0!
05/03/2007	Daily Average	396.40	397.07	0.67	395.61	395.83	0.22	395.74	395.62	-0.12	#DIV/0!	397.58	#DIV/0!
05/04/2007	Daily Average	396.59	397.26	0.68	395.81	397.16	1.35	395.96	395.81	-0.14	396.29	398.45	2.46
05/05/2007	Daily Average	396.75	397.40	0.65	395.94	396.05	0.12	396.11	395.95	-0.16	396.41	397.98	1.58
05/06/2007	Daily Average	396.77	397.34	0.58	396.01	396.11	0.10	396.19	396.04	-0.15	396.46	397.92	1.46
05/07/2007	Daily Average	396.81	397.32	0.51	396.08	396.24	0.17	396.28	396.14	-0.14	396.51	397.80	1.29
05/08/2007	Daily Average	396.88	397.33	0.45	396.15	396.31	0.16	396.36	396.21	-0.15	396.55	397.73	1.18
05/09/2007	Daily Average	397.14	397.80	0.65	396.43	396.51	0.08	396.58	396.43	-0.14	396.86	398.44	1.58
05/10/2007	Daily Average	397.60	398.45	0.86	396.71	396.81	0.10	396.87	396.74	-0.13	397.29	399.53	2.24
05/11/2007	Daily Average	397.95	398.90	0.95	397.02	397.09	0.07	397.14	397.03	-0.10	397.62	399.80	2.19
05/12/2007	Daily Average	398.16	399.10	0.94	397.25	397.34	0.09	397.38	397.26	-0.12	397.86	400.07	2.21
05/13/2007	Daily Average	398.40	399.26	0.86	397.46	397.55	0.09	397.60	397.48	-0.12	398.50	400.22	1.72
05/14/2007	Daily Average	398.58	399.42	0.84	397.70	397.76	0.06	397.84	397.74	-0.10	398.87	400.37	1.51
05/15/2007	Daily Average	398.73	399.56	0.83	397.94	398.00	0.05	398.08	397.94	-0.14	400.10	400.53	0.43
05/16/2007	Daily Average	398.81	399.59	0.79	398.00	398.06	0.06	398.14	398.02	-0.12	404.08	400.47	-3.61
05/17/2007	Daily Average	398.78	399.50	0.73	398.03	398.09	0.05	398.20	398.06	-0.14	404.84	400.32	-4.52
05/18/2007	Daily Average	398.74	399.34	0.60	398.06	398.14	0.09	398.24	398.11	-0.13	398.48	400.04	1.56
05/19/2007	Daily Average	398.61	399.08	0.47	398.05	398.08	0.03	398.24	398.07	-0.18	398.38	399.58	1.20
05/20/2007	Daily Average	398.47	398.77	0.30	397.92	397.98	0.05	398.14	397.95	-0.19	398.20	399.12	0.93
05/21/2007	Daily Average	398.17	398.36	0.20	397.73	397.78	0.05	397.95	397.75	-0.20	397.91	398.55	0.63
05/22/2007	Daily Average	397.85	397.92	0.07	397.47	397.51	0.04	397.72	397.48	-0.23	397.61	397.93	0.33
05/23/2007	Daily Average	397.54	397.54	-0.01	397.22	397.24	0.02	397.45	397.22	-0.23	397.30	397.43	0.14
05/24/2007	Daily Average	397.29	397.25	-0.04	397.00	397.06	0.06	397.25	397.01	-0.24	397.07	397.07	0.00
05/25/2007	Daily Average	397.07	396.95	-0.12	396.81	396.84	0.04	397.06	396.79	-0.27	396.84	396.70	-0.14
05/26/2007	Daily Average	396.94	396.84	-0.10	396.68	396.70	0.02	396.95	396.68	-0.27	396.69	396.54	-0.14
05/27/2007	Daily Average	396.80	396.68	-0.11	396.54	396.55	0.02	396.81	396.54	-0.27	396.56	396.45	-0.11
05/28/2007	Daily Average	396.79	396.71	-0.07	396.49	396.49	0.00	396.74	396.45	-0.29	396.47	396.47	-0.02
05/29/2007	Daily Average	396.98	397.02	0.04	396.59	396.58	-0.01	396.80	396.58	-0.22	396.66	396.99	0.32
05/30/2007	Daily Average	397.11	397.23	0.12	396.70	396.79	0.09	396.95	396.71	-0.25	396.79	397.29	0.50
05/31/2007	Daily Average	397.13	397.21	0.08	396.75	398.82	2.07	397.02	396.76	-0.25	396.84	397.12	0.28

GROUNDWATER MIGRATION CONTROL SYSTEM

MAY DAILY AVERAGE PUMPING RATES AND WATER LEVELS

Date/Time		GROUNDWATER LEVELS							
		PZ-1_OUTSI	PZ-1_INSIDE	PZ-2_OUTSI	PZ-2_INSIDE	PZ-3_OUTSI	PZ-3_INSIDE	PZ-4_OUTSI	PZ-4_INSIDE
		DE		DE		DE		DE	
05/01/2007	Daily Average	400.67	394.35	402.52	396.13	402.40	395.09	399.51	395.94
05/02/2007	Daily Average	400.69	394.51	402.45	396.33	402.32	395.29	399.54	396.09
05/03/2007	Daily Average	400.65	394.66	402.30	396.48	402.15	395.42	399.53	396.27
05/04/2007	Daily Average	400.87	394.85	402.58	396.67	402.43	395.61	399.77	396.44
05/05/2007	Daily Average	400.95	394.99	402.58	396.81	402.47	395.75	399.80	396.59
05/06/2007	Daily Average	400.54	395.03	401.83	396.88	401.78	395.79	399.47	396.62
05/07/2007	Daily Average	400.04	395.14	400.94	396.95	400.96	395.87	398.98	396.65
05/08/2007	Daily Average	399.83	395.18	400.56	397.01	400.63	395.90	398.78	396.71
05/09/2007	Daily Average	401.41	395.42	403.15	397.26	403.01	396.21	400.29	397.04
05/10/2007	Daily Average	403.12	395.83	405.71	397.63	405.43	396.62	401.88	397.52
05/11/2007	Daily Average	403.83	396.14	406.66	397.97	406.34	396.95	402.54	397.88
05/12/2007	Daily Average	403.91	396.40	406.74	398.18	406.41	397.17	402.70	398.10
05/13/2007	Daily Average	403.96	396.62	406.63	398.41	406.30	397.41	402.73	398.33
05/14/2007	Daily Average	403.89	396.82	406.39	398.68	406.10	397.61	402.73	398.58
05/15/2007	Daily Average	403.86	397.08	406.17	398.89	405.96	397.79	402.72	398.75
05/16/2007	Daily Average	403.69	397.09	405.80	398.91	405.61	397.90	402.53	398.79
05/17/2007	Daily Average	403.17	397.10	404.96	398.93	404.84	397.92	402.11	398.77
05/18/2007	Daily Average	402.39	397.08	403.59	398.95	403.57	397.93	401.35	398.73
05/19/2007	Daily Average	401.31	397.04	401.86	398.87	401.95	397.83	400.33	398.58
05/20/2007	Daily Average	400.40	396.89	400.47	398.73	400.65	397.65	399.46	398.35
05/21/2007	Daily Average	399.30	396.62	398.82	398.48	399.11	397.40	398.42	398.05
05/22/2007	Daily Average	398.21	396.28	397.22	398.16	397.59	397.05	397.34	397.66
05/23/2007	Daily Average	397.44	395.97	396.17	397.85	396.60	396.71	396.59	397.32
05/24/2007	Daily Average	396.84	395.72	395.38	397.60	395.83	396.45	396.03	396.90
05/25/2007	Daily Average	396.27	395.43	394.58	397.33	395.06	396.14	395.47	396.56
05/26/2007	Daily Average	396.11	395.32	394.43	397.22	394.90	396.04	395.30	396.43
05/27/2007	Daily Average	395.95	395.08	394.31	396.98	394.75	395.86	395.16	395.99
05/28/2007	Daily Average	396.41	394.99	395.14	396.93	395.55	395.79	395.58	396.43
05/29/2007	Daily Average	397.55	395.25	396.92	397.20	397.23	396.05	396.67	396.64
05/30/2007	Daily Average	397.97	395.50	397.45	397.40	397.76	396.26	397.08	396.92
05/31/2007	Daily Average	397.71	395.55	396.94	397.43	397.30	396.28	396.85	396.93